39
38

TO DO LIST

CUT THREE COGS

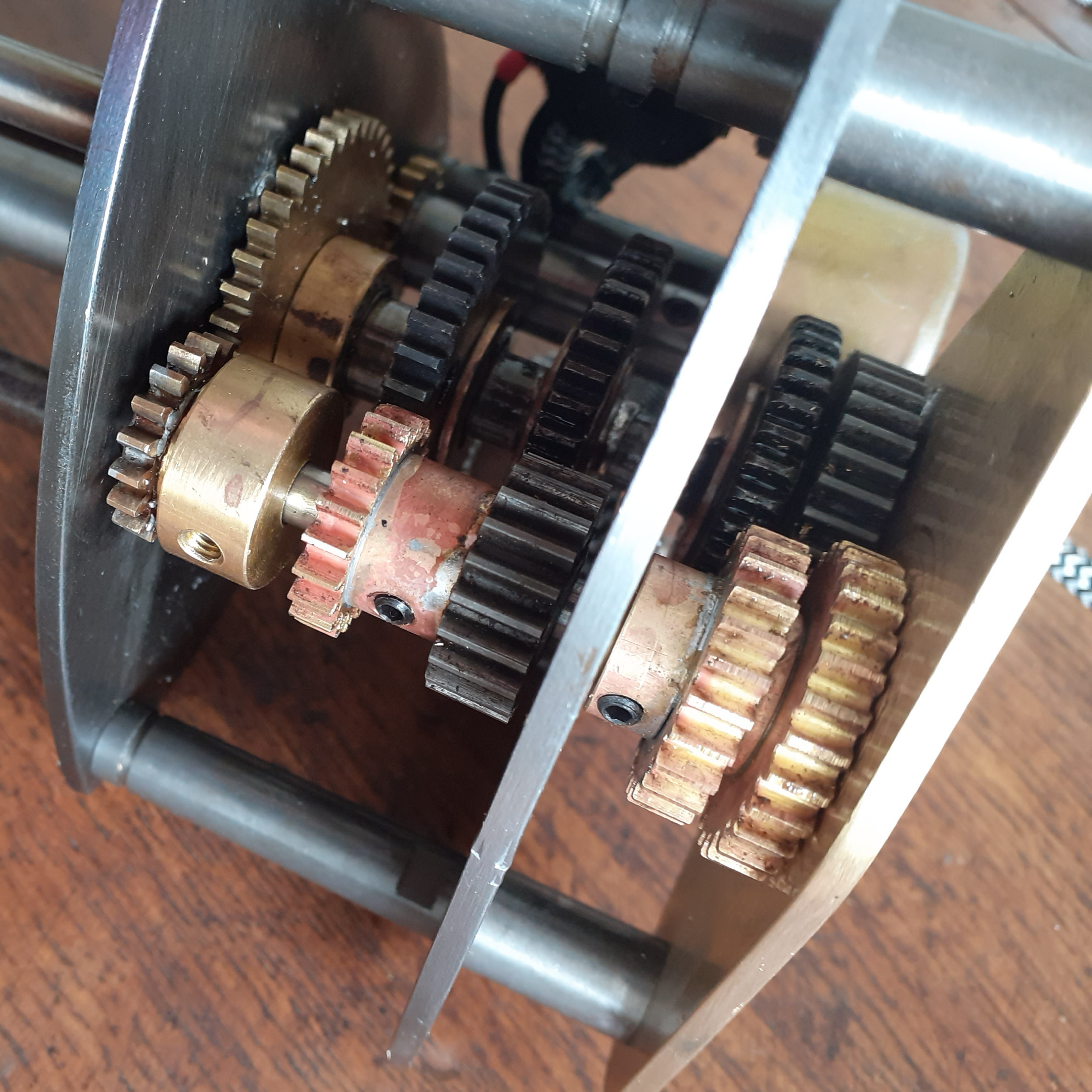
20 TOOTH COG → 18 DEGREES
EACH → 22 mm OD

24 TOOTH COG → 15 DEGREES
EACH 26 mm OD

27 TOOTH COG → 13.3332
DEGREES EACH = $13\frac{1}{3}$ = 13 15^{min}
29 mm OD

BAPTIS

MS3-22



WITH THE TELLURION, I WAS PLEASED WITH THE DESIGN, WHICH WAS JUST "RIGHT" BUT THE BELT DRIVE WAS TOO JERKY. FINE FOR HIGH SPEED. NOT FOR THIS.

IN LOOKING INTO MILLING MY OWN GEARS, I DISCOVERED THAT THE GREAT FIND OF SCRAPYARD GEARS I USED ON ALL THE OTHER ORRERIES ARE ALL MODULE 1. ALSO, THAT I HAVE MORE GEARS IN MODULE 1. SO THE BAROQUE TELLURION NOW HAS GEARS FROM THE "GREAT GEAR FIND"; A HAND DRILL AND THREE BRASS GEARS I MILLED MYSELF.

A LITTLE VICTORY, A LITTLE REDEMPTION

I DISCOVERED THAT BRASS IS THE IDEAL MATERIAL, AS IT'S EASILY SOLDERED FOR MORE COMPLEX ASSEMBLIES THAT CAN, WITH SOFT SOLDERING EASILY BE DISASSEMBLED.

THE CUTTING DIRECTION WAS INTO THE GEAR BLANK HOLDER BUT THIS OBSCURED THE CUTTING. NEXT TIME, ADAPT THE HOLDER BUT HAVE THE CUTTER IN THE FRONT. THIS WILL HAVE CUTTING DIRECTION AWAY FROM THE HOLDER BUT THE VISABILITY WILL HELP IN GAUGING PROPER TOOTH DEPTH

Left sheet

(50)

~~18 - 32*~~
~~20 - 30~~
~~*25 - 25*~~
~~30 - 20~~
~~*32 - 18~~

~~(48)~~

(48)

16 - 32
18 - 30
24 - 24
30 - 18
32 - 16

FOR TELLURION WITH MOONS

NEARLY OR ALL GEAR BLANKS CAN BE CUT FROM ROUND BAR ON LATHE

(40)

15 - 25*
*16 - 24
20 - 20
24 - 16*
*25 - 15

(25 : 14.4)

(16 : 22.5)

~~(62)~~

~~12 - 50~~
~~30 - 32~~

(70)

16 - 54
20 - 50*
*25 - 45
30 - 40
40 - 30
45 - 25*
50 - 20
54 - 16

Right sheet

$\frac{360}{80} = 4.5$

$\frac{360}{90} = 4$

$\frac{360}{96} = 3.75$

$\frac{360}{100} = 3.6$

GEARS WITH 60 TEETH COMBINED

↓

12 - 48*
15 - 45
20 - 40
24 - 36
30 - 30
36 - 24
40 - 20
45 - 15
*48 - 12

THIS IS NINE! PLANETS ORRERY

ONLY 48 AND IS 7.5 WITH THE 360° ROTARY TABLE. REST IS FULL DEGREES NO FRACTIONS

LARGER DIAMETERS NEED TO BE CUT FROM FLAT PLATE

NINE PLANET MAY BE TOO ~~CLUTTERED~~ CLUTTERED OR FOR JUST ONE LAST HURRAH!!

SIX OR SEVEN "JUST RIGHT"? A STRONGER DESIGN?